

ERDENE COMMENCES DRILLING AT DARK HORSE GOLD PROSPECT

Press Release
Halifax, Nova Scotia
2023.06.08

Erdene Resource Development Corporation (TSX: ERD | MSE: ERDN) (“Erdene” or the “Company”) is pleased to announce commencement of exploration at the Dark Horse Gold prospect, located approximately two kilometers north of its Bayan Khundii Gold Project in the Khundii Minerals District (the “District”) in southwest Mongolia.

Quotes from the Company

“Since discovery in early 2021, Erdene has defined a 1.5 kilometre mineralized trend at the Dark Horse Mane prospect,” said Peter Akerley, Erdene’s President and CEO. “The current program will test a number of near-surface targets in the 20 square kilometer greater Dark Horse prospect area, outside the main mineralized zone, that have the potential to host high-grade gold mineralization.”

“Located just two kilometres north of the main Bayan Khundii gold deposit, ore from Dark Horse is expected to provide flexibility in managing high-grade ore feed at the Bayan Khundii gold processing plant,” continued Mr. Akerley. “Growing high-grade gold resources at Dark Horse will strengthen the already strong economics of the Bayan Khundii gold project, that is slated to break ground in the coming weeks.”

Program Overview

The Q2 2023 greater Dark Horse exploration program includes 18 shallow holes totaling approximately 1,000 metres to test for near-surface oxide related gold mineralization similar to the Dark Horse Mane deposit. In conjunction with the diamond drill program, the Company is also completing a gradient array IP geophysical survey covering a 9 square kilometre area, over the core of the greater Dark Horse prospect.

The target area (see Dark Horse Prospects Plan Map attached in release) exhibits extensive gold and indicator element mineralization over several kilometres along NE trending structures and their intersections with N-S faults, parallel to the Dark Horse Mane structure. Results from this program will establish priority targets for a larger program, scheduled to start in Q3, following the receipt and interpretation of results from the current drilling and geophysical programs.

Dark Horse Prospect Overview

The greater Dark Horse prospect (approximately 20 square kilometres) is located in the northern portion of the Khundii mining and Ulaan exploration licenses and is characterized by elevated gold in soil anomalism with multiple surface rock-chip, trench and drill core samples assaying greater than 1 g/t gold. Trace element anomalism, geophysical anomalies related to alteration and mineralization, structures interpreted to represent conduits for mineralizing fluids, and alteration signatures supporting an epithermal mineralization model characterize the greater Dark Horse prospect area. To date, the Company has completed 24,092 metres of drilling in 218 holes ranging in vertical depths from 8 to 318 metres within the greater Dark Horse prospect portion of the Khundii mining license, including 28 holes totaling 2,355 metres in 2022.

Most of the drilling to date has been focused on the Dark Horse Mane discovered in early 2021. Erdene discovered Dark Horse Mane, 2 kilometres north of the Bayan Khundii deposit, when initial drilling returned 6.0 g/t gold over 45 metres, beginning 10 metres downhole, including 8 metres of 27.1 g/t gold (AAD-58). Drilling over the past year has defined a 1.5-kilometre trend of alteration and gold mineralization within the Dark Horse Mane prospect that remains open along strike to the north and south, and at depth. Highlight interceptions at Dark Horse Mane since the initial discovery include:

- AAD-126: 30 metres of 5.6 g/t gold, beginning 10 metres downhole, including 24.1 g/t over six metres, starting 26 metres downhole
- AAD-137: 24.5 metres of 9.4 g/t gold beginning 1.5 metres downhole, including 13.5 metres of 16.1 g/t gold
- AAD-138: 25 metres of 6.1 g/t gold beginning 18 metres downhole, including 8 metres of 17.1 g/t gold
- AAD-177: 23 metres of 11.4 g/t gold beginning 1 metre downhole, including 4 metres of 59.8 g/t gold within 8 metres of 32.2 g/t gold
- AAD-178: 15 metres of 42.8 g/t gold beginning 11 metres downhole, including 3 metres of 160.4 g/t gold within 5 metres of 123.5 g/t gold
- AAD-218: 12 metres of 20.2 g/t gold beginning at surface, including 6 metres 39.6 g/t gold

The Dark Horse Mane prospect is associated with a north-south trending, linear structural corridor which intersects deep seated northeast trending transform faults, believed to be a conduit for primary mineralizing fluids. The N-S structure has been traced over five kilometres, from the southern portion of the Bayan Khundii deposit to the northern extension of Dark Horse Mane. Gold mineralization is hosted within strongly altered tuffaceous and volcanoclastic rocks, crosscut by quartz and quartz-hematite veins and stockwork zones. The Dark Horse Mane shallow oxide zone begins at surface, hosting supergene enriched gold zones with values up to 195 g/t over 1 metre and ranging in thickness from 20 to 60 metres vertical depth with locally deeper oxidation along fractures. The high-grade oxide body exhibits strong continuity along a north-south strike. Mineralization remains open along strike and at depth.

The near surface oxide gold zones discovered at Dark Horse Mane are the result of oxidation of sulfide bearing epithermal veins and hydrothermal breccias within white mica

altered host lithologies. Limited deeper drilling has intersected gold bearing epithermal veins and associated white mica and sulfide alteration zones to a depth of up to 230 metres vertically, that remains open at depth. The gold mineralization near surface at Dark Horse Mane is related to broader areas of structurally controlled alteration and mineralization believed to be connected to feeder structures, distributing gold bearing fluids over a wide area as these fluids approached the paleo surface. Evidence for these feeder structures includes a series of exposed residual quartz lithocaps, associated locally with increasing copper anomalism at depth, interpreted to predate the gold mineralization. These lithocaps are distributed along dominant NE trending structures believed to represent transform faults and potentially feeder conduits from a magmatic porphyry source at depth. The highest-grade gold bearing oxide zones at the southern end of the Dark Horse Mane are located proximal to the residual quartz lithocaps and hosted within tuffaceous to porphyritic volcanoclastic units.

RC drilling in Q2 2022 identified several prospects within the greater Dark Horse area. Multiple RC holes at East Mane, an 8-hectare area, 500 metres east of Dark Horse Mane, returned anomalous gold (up to 0.22 g/t gold over 3 metres) and pathfinder elements (antimony and arsenic). The East Mane area also exhibits structural and geological similarities to high-grade Dark Horse Mane South mineralization.

About Erdene

Erdene Resource Development Corp. is a Canada-based resource company focused on the acquisition, exploration, and development of precious and base metals in underexplored and highly prospective Mongolia. The Company has interests in three mining licenses and an exploration license in Southwest Mongolia, where exploration success has led to the discovery and definition of the Khundii Minerals District. Erdene Resource Development Corp. is listed on the Toronto and the Mongolian stock exchanges. Further information is available at www.erdene.com. Important information may be disseminated exclusively via the website; investors should consult the site to access this information.

Qualified Person and Sample Protocol

Peter Dalton, P.Geo. (Nova Scotia), Senior Geologist for Erdene, is the Qualified Person as that term is defined in National Instrument 43-101 and has reviewed and approved the technical information contained in this news release. All samples have been assayed at SGS Laboratory in Ulaanbaatar, Mongolia. In addition to internal checks by SGS Laboratory, the Company incorporates a QA/QC sample protocol utilizing prepared standards and blanks. All samples undergo standard fire assay analysis for gold and ICP-OES (Inductively Coupled Plasma Optical Emission Spectroscopy) analysis for 33 additional elements. For samples that initially return a grade greater than 5 g/t gold, additional screen-metallic gold analysis is carried out which provides a weighted average gold grade from fire assay analysis of the entire +75 micron fraction and three 30-gram samples of the -75 micron fraction from a 500 gram sample.

Erdene's drill core sampling protocol consisted of collection of samples over 1 or 2 metre intervals (depending on the lithology and style of mineralization) over the entire length of

the drill hole, excluding minor post-mineral lithologies and un-mineralized granitoids. Sample intervals were based on meterage, not geological controls, or mineralization. All drill core was cut in half with a diamond saw, with half of the core placed in sample bags and the remaining half securely retained in core boxes at Erdene's Bayan Khundii exploration camp. All samples were organized into batches of 30 including a commercially prepared standard, blank and either a field duplicate, consisting of two quarter-core intervals, or a laboratory duplicate. Sample batches were periodically shipped directly to SGS in Ulaanbaatar via Erdene's logistical contractor, Monrud Co. Ltd.

Reported intervals are apparent thicknesses, i.e., downhole widths. The current Bayan Khundii drill holes (reported in this release) are all dipping from 45 to 60 degrees and oriented to intersect SW dipping WNW trending gold bearing veins. Additional study is required to confirm true widths. Reported grades for intervals are weighted averages based on length of sampling intervals. No top cut has been applied; however, all intervals greater than 10 g/t gold and 100 g/t gold are reported individually for clarity

Forward-Looking Statements

Certain information regarding Erdene contained herein may constitute forward-looking statements within the meaning of applicable securities laws. Forward-looking statements may include estimates, plans, expectations, opinions, forecasts, projections, guidance, or other statements that are not statements of fact. Although Erdene believes that the expectations reflected in such forward-looking statements are reasonable, it can give no assurance that such expectations will prove to have been correct. Erdene cautions that actual performance will be affected by a number of factors, most of which are beyond its control, and that future events and results may vary substantially from what Erdene currently foresees. Factors that could cause actual results to differ materially from those in forward-looking statements include the ability to obtain required third party approvals, market prices, exploitation, and exploration results, continued availability of capital and financing and general economic, market or business conditions. The forward-looking statements are expressly qualified in their entirety by this cautionary statement. The information contained herein is stated as of the current date and is subject to change after that date. The Company does not assume the obligation to revise or update these forward-looking statements, except as may be required under applicable securities laws.

NO REGULATORY AUTHORITY HAS APPROVED OR DISAPPROVED THE CONTENTS OF THIS RELEASE

Erdene Contact Information

Peter C. Akerley, President and CEO, or
Robert Jenkins, CFO

Phone: (902) 423-6419

Email: info@erdene.com

Twitter: <https://twitter.com/ErdeneRes>

Facebook: <https://www.facebook.com/ErdeneResource>

LinkedIn: <https://www.linkedin.com/company/erdene-resource-development-corp/>

KHUNDII MINERALS DISTRICT PLAN MAP

Greater Dark Horse 2023 Exploration

Drill Testing Shallow High-Grade Gold Targets

